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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,638	08/03/2001	Alain Lebrun	025219-339	5222

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EXAMINER

HANNAHER, CONSTANTINE

ART UNIT

PAPER NUMBER

2878

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/890,638

Applicant(s)

LEBRUN ET AL. 

Examiner

Constantine Hannaher

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2 and 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6 . 6) ☐ Other: _____

DETAILED ACTION

Oath/Declaration

1. When applicant states that the post office address is the "same" as residence applicant's representative should keep in mind that a "residence" is a city and state or foreign country. The superfluous information given for residence is accepted as constituting a mailing address. The Office has *not* been able to discern the city and state or foreign country of residence from the information supplied. See the requirements of 37 CFR 1.63(c)(1) as amended effective November 7, 2000.
2. A declaration is an application paper, 37 CFR 1.52(b). 37 CFR 1.52(a)(1)(iv) requires all application papers to be legibly written either by a typewriter or machine printer. The reasons the Office amended 37 CFR 1.52(a) to include this requirement are directly applicable to the identification required by 37 CFR 1.63(a)(2) and 37 CFR 1.63(a)(3). The Office seeks sufficient clarity and contrast between the paper and the writing thereon to permit electronic reproduction by use of digital imaging and optical character recognition. Applications containing hand-written papers create an inordinate administrative burden on the Office during the initial processing, examination, and publishing of the application as a patent. Therefore, the Office no longer permits applicants to submit application papers that do not meet the standards set forth in the rules. See 61 Federal Register 161 of 19 August 1996, page 42793.

Drawings

3. The corrected or substitute drawings were received on August 21, 2001. These drawings are acceptable.

Claim Objections

4. Claims 1-3 are objected to because of the following informalities: the use in line 7 (actual count) of claim 1 of "the absorbent enclosure" will be treated as if it referred to the "absorbing

enclosure" of line 2 (actual count). Appropriate correction is required. The balance of the claims is objected to on the basis of their dependence.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Xu *et al.* (US006518579B1) in view of Goto (JP 62-80579-A) and Boxen (US006353227B1).

With respect to independent claim 1, Xu *et al.* discloses (Fig. 1) a radiation detector comprising a counter **10** and an absorbing enclosure **16** surrounding the counter **10** except for the collimation slit **18** leading to the counter **10**. However, Xu *et al.* does not disclose any adjustment of the width of the collimation slit **18**. Nevertheless, Goto discloses that a radiation detector (Fig. 1) comprising a counter **11** may benefit from a collimator **12** with a variable slit width determined on the basis of the gamma ray transmissivity (that is, on the basis of the counter signal current) to

correct an error in measurement. In view of the error reduction afforded by the variable width of the collimation slit suggested by Goto, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the radiation detector of Xu *et al.* to have a collimation slit 18 width which may be increased or reduced on the basis of the signal current from counter 10. The collimation slit suggested by Goto is characterized by a motor (inherent in the presence of the gear in Fig. 3) and a transmission (the L-shaped bracket) connecting the motor to a mobile portion 13 of the absorbent enclosure forming collimator 12, partially delimiting the collimation slit, to move the mobile portion 13 to increase or reduce the width of the collimation slit depending on the activity of the motor. To retain the absorbent structure 16 of Xu *et al.* to the extent possible when incorporating the variable collimation slit suggested by Goto, it would have been obvious to one of ordinary skill in the art at the time the invention was made to place the motor suggested by Goto on the side of the detector 10 opposite the collimation slit 18 and have the transmission extend through the absorbent enclosure 16. The movement of a collimator element with a servocontrolled motor is routine in the art of radiation detectors, as shown by element 18 of Boxen (column 4, lines 61-65)

Response to Submission(s)

8. The amendment filed August 3, 2001 has been entered.
9. This application has been published as US2002/0125429A1 (with the wrong drawings) on September 12, 2002.

Allowable Subject Matter

10. Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: Xu *et al.* and Goto cannot suggest the particular axis of articulation or the drilling.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Constantine Hannaher whose telephone number is (703) 308-4850. The examiner can normally be reached on Monday-Friday with flexible hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (703) 308-4852. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

ch
April 18, 2003


Constantine Hannaher
Primary Examiner